Technology In Society

An International Journal

SUBJECT/AUTHOR INDEXES

Volume 23, 2001

PERGAMON

Technology In Society

An International Journal

Edited by George Bugliarello and A. George Schillinger

Web site: http://www.elsevier.com/locate/techsoc/

ADVISORY BOARD

Philip H. Abelson	Don Gilbert	Joseph G. Perpich
D. Allan Bromley	William T. Golden	Victor Rabinowitch
Harvey Brooks	Mel Horwitch	Nathan Rosenberg
Mario A. Bunge	Cordell Hull	Richard S. Rosenbloom
Daniel Callahan	Arthur Kantrowitz	Rustum Roy
William D. Carey	Hans Mark	Jacob Sheinkman
Wilbert K. Chagula	Carl Mitcham	Edward Teller
Wolhee Choe	Manabu Nakagawa	John G. Truxal
Edward E. David, Jr.	Maciej Nalecz	Victor L. Urquidi
Frank P. Davidson	Rodney W. Nichols	Edward Wenk, Jr.
Richard S. Eckaus	Thomas R. Odhiambo	Anthony J. Wiener
Renee Fox	Sir Peter Parker	Langdon Winner

Technology In Society: An International Journal maintains editorial offices at the Polytechnic University, 6 Metrotech Center, Brooklyn, NY 11201, USA. George Bugliarello is Chancellor of the Polytechnic and A. George Schillinger is Professor of Management.

Frequency: Published Quarterly in January, April, August and November

Publication information: Technology in Society (ISSN 0160-791X). For 2002, volume 24 is scheduled for publication. Subscription prices are available upon request from the Publisher or from the Regional Sales Office nearest you or from this journal's website (http://www.elsevier.com/locate/techsoc). Further information is available on this journal and other Elsevier Science products through Elsevier's website: (http://www.elsevier.com). Subscriptions are accepted on a prepaid basis only and are entered on a calendar year basis. Issues are sent by standard mail (surface within Europe, air delivery outside Europe). Priority rates are available upon request. Claims for missing issues should be made within six months of the date of dispatch.

Author enquiries: For enquiries relating to the submission of articles (including electronic submission), the status of accepted articles through our Online Article Status Information System (OASIS), author Frequently Asked Questions and any other enquiries relating to Elsevier Science, please consult http://www.elsevier.com/locate/authors/

For specific enquiries on the preparation of electronic artwork, consult http://www.elsevier.com/locate/authorartwork/

Contact details for questions arising after acceptance of an article, especially those relating to proofs, are provided when an article is accepted for publication.

Orders, claims, and product enquiries: please contact the Customer Support Department at the Regional Sales Office nearest you:

New York: Elsevier Science, PO Box 945, New York, NY 10159-0945, USA; phone: (+1) (212) 633 3730 [toll free number for North American customers: 1-888-4ES-INFO (437-4636)]; fax: (+1) (212) 633 3680; e-mail: usinfo-f@elsevier.com

Amsterdam: Elsevier Science, PO Box 211, 1000 AE Amsterdam, The Netherlands; phone: (+31) 20 4853757; fax: (+31) 20 4853432; e-mail: nlinfo-f@elsevier.nl

Tokyo: Elsevier Science, 9-15 Higashi-Azabu 1-chome, Minato-ku, Tokyo 106-0044, Japan; phone: (+81) (3) 5561 5033; fax: (+81) (3) 5561 5047; e-mail: info@elsevier.co.jp

Singapore: Elsevier Science, No. 1 Temasek Avenue, #17-01 Millenia Tower, Singapore 039192; phone: (+65) 434 3727; fax: (+65) 337 2230; e-mail: asiainfo@elsevier.com.sg

Rio de Janeiro: Elsevier Science, Rua Sete de Setembro 111/16 Andar, 20050-002 Centro, Rio de Janeiro - RJ, Brazil; phone: (+55) (21) 509 5340; fax: (+55) (21) 507 1991; e-mail: elsevier@campus.com.br [Note (Latin America): for orders, claims and help desk information, please contact the Regional Sales Office in New York as listed above]

Copyright © 2002 Elsevier Science Ltd

Periodicals postage paid at Rahway, NJ. Technology in Society (ISSN 0160-791X) is published 4 times a year in January, April, August and November by Elsevier Science Ltd., The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK. The annual subscription price in the USA is $856.00.

Technology in Society is circulated by Mercury International Limited, 365 Blair Road, Avenel, NJ 07001, USA.

POSTMASTER: Please send address corrections to: Technology in Society, c/o Customer Services, Elsevier Science Inc., 655 Avenue of the Americas, New York, NY 10010, USA.

UMI

SHOULD READ 2001.

Pergamon

Technology in Society 24 (2002) III–VI

Technology In Society

www.elsevier.com/locate/techsoc

Technology in Society

Subject/Title Index to Volume 23, 2002

administration 147–157
adoption, N-Trak technology 93–108
Agribusiness technology in 2010: directions and challenges 59–72
agriculture
  agribusiness 59–72
  innovations 93–108
  production 59–72
aircraft 1–9, 551–562
Armand report 361–374
arms control 291–315
art academies 451–460

Balkans 291–315
bar-codes 159–175
behavioral profiles 11–27
biometrics 11–27
biotechnology 59–72, 241–264
Britain 317–325
Bush administration 147–157

cancer 131–146
citizenship, global 525–533
civil society 525–533
Clinton administration 147–157
Cold War 291–315, 327–336, 395–405, 427–439, 461–471
communication
  East-West 427–439
  technology 79–91, 109–120
  wireless communications 159–175, 217–226
competition
  industrial innovation 227–240
  multi-species 131–146
Comprehensive Test Ban Treaty 461–471
conflicts
  Europe 291–315
  international 441–450, 489–503
  Maghrebi scientists 473–487
  regional 473–487
  resolution 287–289, 451–460
Congress, constituency, and jobs: the Superconducting Super Collider, the Space Station, and National Science Policy 177–194
consumers 159–175
cooperation
  Europe 291–315, 383–393
  Franco–German 327–336, 407–426
  German 395–405
  international relations 441–450
  Maghrebi scientists 473–487
  NATO 375–381
  political role 461–471
  regional conflicts 473–487
Coordination of science and technology in the first Bush administration 147–157
crop production 59, 72
cross-cultural research 563–581
A cross-national comparative analysis of innovation policy in the integrated circuit industry 227–240
cultural issues
  evolution 123–130
  regional conflicts 473–487
  scientific exchanges 407–426
  softlifting and piracy 563–581

de-entrenching systems 265–286
The "de-materialisation" myth 505–514
The "De-materialisation' Myth" and the Limits to Growth: a Commentary on Dr. Trainer's Paper 515–521
Death and the human environment: the United States in the 20th century 131–146
decision-making processes 93–108
defense science 361–374
Developing countries and the aircraft industry: match or mismatch 551–562
development
  industry 29–57, 551–562
  rural 79–91
  space 535–550
  technology 337–348
disease 131–146

E-commerce and megamachines: identification, connectivity, and inference engines 159–175
earth stations 195–216
East-West communications 427–439
economic development in rural communities 79–91
economic growth 337–348, 505–514, 515–521

PII: S0160-791X(02)00002-7

space activities 535–550
electronic communication, farming 109–120
energy
consumption 505–514, 515–521
crisis 535–550
production 535–550
engineering
genetic 241–264
macro 535–550
entrenchment 265–286
environment
biotechnology 241–264
global issues 535–550
hazards 265–286
human 131–146
influences 29–57
Equatorial Alliance 535–550
ethics 441–450
biotechnology and genetic engineering 241–264
software 563–581
EU *see* European Union
Europe
integration 383–393
unification 291–315, 349–359
European Union (EU) 383–393
evolution 123–130
Evolution of an agricultural innovation: the N-Trak soil nitrogen test—adopt, discontinue, or reject? 93–108
exchanges, social sciences 427–439
Extension Services 109–120

farming 59–72, 73–77
N-Trak technology 93–108
telecommunications 109–120
Federal Coordinating Council for Science, Engineering and Technology (FCCSET) 147–157
flight characteristics tests 1–9
food
biotechnology 241–264
production 59–72
Fordism 29–57
forecasting, agribusiness technology 59–72
foreign policy 395–405, 461–471
forest industry 29–57
Foreword: the history of studies of scientists' roles in international conflict resolution 287–289
Framework Programs 383–393
France–Germany 1945: building a common future 327–336
Franco–German relations 327–336, 407–426
fuel generation
see also energy production
biotechnology 241–264

genetic engineering 241–264
geographic information systems (GIS) 59–72
Germany
see also Franco–German relations
foreign policy 395–405
science 317–325
GIS *see* geographic information systems
Global citizenship and the real world of technology 525–533
global environmental issues 535–550
global positioning systems (GPS) 59–72
global warming 535–550
globalization 441–450, 505–514, 525–533, 563–581
GPS *see* global positioning systems
ground systems 195–216
growth
limits to 505–514, 515–521
models 131–146

health 241–264, 265–286
heart disease 131–146
human enterprise 123–130
human environment 131–146
human rights 489–503

If you go down to the woods today...:accounting for the survival and eclipse of tree harvesting production systems on the Miramichi River in New Brunswick, Canada 29–57
imaging 11–27
Indian space program 195–216
indigenous R&D 195–216
industrial-military complex 291–315
industry
aircraft 551–562
biotechnology 241–264
development 29–57, 551–562
forest 29–57
industrial-military complex 291–315
innovation 227–240
integrated circuit 227–240
pharmaceutical 241–264
retail 159–175
infectious diseases 131–146
inference engines 159–175
Information Age economy 79–91
information systems 59–72, 159–175
information technology 563–581
information utility 159–175
innovation
N-Trak technology 93–108
policy and systems 227–240
telephone companies in rural areas 79–91
integrated circuit industry 227–240
International Institute of Science and Technology 461–471
international issues
conflicts 451–460, 489–503
cooperation 375–381, 461–471
exchanges 407–426
peace 375–381
policy 461–471

relations 291–315, 327–336, 441–450
science contact 317–325
International Space Station 177–194
Internet 59–72, 159–175, 217–226

Jacksonian tradition 489–503
justice 489–503

Kaiser-Wilhelm-Gesellschaft 317–325

LANs *see* local area networks
law enforcement 11–27
legal areas of inquiry, biotechnology and genetic engineering 241–264
'limits to growth' 505–514, 515–521
livestock production 59–72
local area networks (LANs) 217–226
logistic models 131–146
long-term planning in science 427–439

macro-engineering 535–550
Maghrebi scientists 291–315, 473–487
Maghrebi scientists and regional conflict 473–487
Malthusian projections 515–521
managers of rural telephone companies 79–91
Max Planck Institute 317–325
megamachines 159–175
mobile computing 159–175
monitoring systems 11–27
mortality 131–146
motivation 375–381
multi-participant initiatives 147–157

N-Trak technology 93–108
national culture 563–581
national innovation system 227–240
national science policy 177–194
NATO 361–374, 375–381, 461–471
NATO science programs: origins and influence 361–374
NATO's science programs: origins and influence 375–381
networked computers 159–175
New technologies for rural America: boon or bane? 73–77
nitrogen, soil testing 93–108
nuclear research 349–359

objectivity 123–130
OECD *see* Organization for Economic Cooperation and Development
OEEC *see* Organization for European Economic Cooperation
Organization for Economic Cooperation and Development (OECD) 337–348
Organization for European Economic Cooperation (OEEC) 337–348
organizational innovativeness 79–91
organizational sciences 451–460

Oslo Accords 489–503

peace 291–315, 375–381, 441–450, 489–503
pharmaceutical industry 241–264
piracy of software 563–581
planning 427–439
plastics 265–286
Police technology in cities: Changes and challenges 11–27
policing 11–27
policy
innovation 227–240
national science 177–194
The political role of scientific cooperation 461–471
politics
biotechnology and genetic engineering 241–264
congressional 177–194
forest industry 29–57
Franco–German relations 407–426
leadership 147–157
regional conflicts 473–487
scientific cooperation 461–471
unification 349–359
polyvinyl chloride (PVC) 265–286
portable connectivity 159–175
post-war issues
Europe 291–315, 337–348, 349–359, 427–439
Franco–German relations 327–336, 407–426
German science 317–325
power generation 535–550
see also energy production
precision farming 59–72, 73–77, 109–120
production
agriculture 59–72
tree harvesting systems 29–57
public safety 11–27
Pugwash Conferences 461–471
PVC plastic: a history of systems development and entrenchment 265–286

rapprochement 407–426
A reconsideration of the idealistic vision of science for peace 441–450
Reflections on objectivity and the human enterprise 123–130
regional conflicts 473–487
relations, East–West 427–439
research and development 195–216, 383–393
Research networks as a means of European integration 383–393
retail industry 159–175
reverse salients 265–286
revolution 291–315
rocket launching stations 195–216
The role of the social sciences in East–West relations 427–439
rural communities 73–77, 79–91
Rural telephone companies: offering technology innovations to enhance the economic development

of communities 79–91

satellite control 195–216
scanning, bar-codes 159–175
science
  Franco–German exchanges 407–426
  international conflict resolution 287–289
  international contacts 317–325
  Maghrebi 291–315, 473–487
  motivations 375–381
  NATO 361–374, 375–381
  policy 177–194, 291–315, 337–348, 461–471
  war role 489–503
Science and Franco, German reconciliation since 1945 407–426
Science and scientists in international conflict: traditions and prospects 489–503
Scientific academies in international conflict resolution 451–460
Scientific concerns in an economic environment: science in OEEC–OECD 337–348
Scientific cooperation and technical assistance in German foreign policy: history and present challenges 395–405
Scientific organizations and European unification: a personal view 349–359
Scientists and international relations: a European perspective 291–315
service economy 79–91
shopping systems 159–175
social issues
  biotechnology and genetic engineering 241–264
  forest industry 29–57
Social, political, legal and ethical areas of inquiry in biotechnology and genetic engineering 241–264
Softlifting and piracy: behavior across cultures 563–581
software 563–581
soil nitrogen testing 93–108
solar power generation 535–550
space
  organizations 349–359
  program 195–216
  solar power generation 535–550
  stations 177–194
  transport 535–550
Space development, SPS 2000, and economic growth: the need for macro-engineering diplomacy 535–550
spacecraft control systems 195–216
SPS 2000 535–550
subjectivity 123–130
Superconducting Super Collider 177–194
surveillance systems 11–27
sustainability 505–514, 515–521

technical assistance 395–405
technology
  accumulation 195–216
  development 337–348
  gap 337–348
  global citizenship 525–533
  imports 195–216
  learning 195–216
  systems 265–286
  'techno-economic' infrastructure 395–405
  transfer 551–562
Technology accumulation in the ground systems of India's space program: the contribution of foreign and indigenous inputs 195–216
Telecommunication technology and its applications for farmers and Extension Services 109–120
telecommunications 79–91, 109–120
telephone companies 79–91
tourism 535–550
tracking systems 195–216
transport 535–550
tree-harvesting systems 29–57

unification 291–315, 349–359
The United Kingdom and the reconstruction of German science: the rebirth of Kaiser-Wilhelm-Gesellschaft 317–325
United Kingdom *see* Britain
United States 131–146
universalism 375–381
Unlocking the secrets of the first airplane to fly: the Wright Flyer Project story 1–9
urban public safety 11–27

vendors 159–175

war 291–315, 441–450, 489–503
waste production 505–514
Wireless communication: the next wave of Internet technology 217–226
wireless communications 159–175, 217–226
wireless local area networks 217–226
wireless standards 217–226
wireless Web 217–226
Wright Flyer Project 1–9

Pergamon

Technology In Society 24 (2002) VII

Technology In Society

www.elsevier.com/locate/techsoc

Author Index to Volume 23, 2001

Ausubel, J.H., 131, 287

Baskaran, A., 195
Botzian, R., 395
Bromley, D.A., 147
Bugliarello, G., 121
Burgen, A., 317
Burn, J.M., 563

Carolan, M., 93
Carvalho-Rodrigues, F., 375
Chiu, Y-C., 227
Chorfa, A., 473
Chou, D.C., 217
Clow, M., 29

de Bruijn, E.J., 551
Drenth, P.J.D., 451

Eirich, F.R., 123
El-Ghamrini, S., 79

Gair, J.J., 241
Gasteyer, S., 93
Grémion, P., 427
Gusmão, R., 383

Handberg, R., 177
Hanson, M., 109
Hassan, S.Z., 563

Janczewski, L.J., 563

Kaelble, H., 407
Keynan, A., 287
King, A., 337
Knot, M., 265
Korsching, P.F., 73, 79, 93
Kremer, K.S., 93

Lasley, P., 109
Lebeau, A., 349

MacDonald, P., 29
Marx, H.F., 1
Matsuoka, H., 535
Mehta, M.D., 241
Meyer, P.S., 131
Mulder, K., 265

Nierenberg, W.A., 361
Nunn, S., 11

Padgitt, S., 109
Peter, G., 79, 93

Rovan, J., 327

Salomon, J-J., 291
Schillinger, A.G., 121
Schméder, G., 441
Shore, B., 563
Shyu, J.Z., 227
Skolnikoff, E.B., 461
Solorzano, E., 563
Steenhuis, H-J., 551
Strijbos, S., 525
Sutton, V.V., 147
Swartz, J., 159

Tirmizi, S.N., 93
Tong, P., 93
Trainer, T., 505, 523

Venkatachalam, A.R., 563

Wagner Weick, C., 59
Wernick, I.K., 131
Wiener, A.J., 515

Yalman, N., 489
Yen, D.C., 217
Yuo, C-C., 227

PII: S0160-791X(02)00003-9